ABSTRACT

The present invention provides an optical polarized light source device. The polarized light source device includes at least one carbon nanotube bundle (204) and two gold electrodes (206) respectively connected to ends of the bundle. The bundle has a length of approximately 600 microns and includes a number of carbon nanotubes bundled together and substantially parallel to each other. Each electrode includes at least one gold wire, which is bonded to inside of an end of the bundle by an ultrasonic wire bonder. When the polarized light source device is connected to an electrical source, a polarized incandescent light beam emits from the bundle of the polarized light source device. A direction of polarization of the light beam is parallel to an axis of the bundle. The present invention further provides a method of fabricating the polarized light source device.